Aviation Qualifications

Veregy

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P: 800-460-0995

Address:
3312 East Broadway Road
Phoenix, AZ 85040

Sections

VEREGY

$2B
ENERGY SAVINGS PROJECTS

34
YEARS OF INDUSTRY EXPERIENCE

400+
VEREGY PROFESSIONALS

1000s
BUILDINGS OPTIMIZED

12B
LBS OF CO_2 EMISSIONS REDUCED

Firm Overview

Veregy is a National Association of Energy Services Companies (NAESCO) accredited Energy Service Provider (ESP) and Energy Services Company (ESCO) that provides turnkey engineering, decarbonization, and construction management services. Our team focuses on designing and implementing well-engineered decarbonization solutions that reduce operating costs while improving health and life safety at airports throughout the United States.

We have a national presence while maintaining a client-centric focus that a local small business would provide. Veregy's success at airport facility improvements is based on bringing the best teams together for our clients. Establishing partnerships with the best HUB contractors keeps money in the local community while creating equal employment opportunities. We have a full team of staff, both locally and nationally, ready to support your airport project needs.

Our employees have vast experience and perspectives to bring to Aviation Projects. Many of our developers have years of experience working in occupied buildings and at airports, optimizing central plants, and developing master plans. With 17 offices throughout the United States, Veregy is ready and able to mobilize the right project team. Dedicated subject matter experts, including electric vehicle charging, distributed energy, digital services, runway lighting and more, can be brought in from our national team to assist based on our client's short and long-term priorities.

In addition to our world-class design capabilities, Veregy has financial partners ready to develop structured financing that best meets your project and fiscal goals. Flexible procurement in each state allows our clients to move quickly and select Veregy as their partner for an accelerated approach to your airport energy transition.

VEREGY

Airport Experience

Abraham Lincoln Capital Airport

2.88 MW Ground Mount Solar Array
30 Year Production Warranty
$14.1 Million/year Savings

Columbus Regional Airport

Boiler Replacement
Chiller Upgrades
Mechanical, Electrical and Plumbing Upgrades

Evansville Regional Airport

1.3 MW Solar Car Canopies
$282,582/year Savings
AAAE-Great Lakes Project of the Year

Friday Harbor Airport

Comprehensive Energy Efficiency Assessment
Funded by FAA Airport Improvement Grant

Fort Wayne International Airport

552 kW Auto Canopy Solar System
Demand Management
Solar Maintenance and Remote Monitoring

Indianapolis International Airport

25 MW Ground Mount Solar Array
$1.045 Million/year Savings
Central Energy Plant
9,000 Assets Managed

Marion Municipal Airport

LED Lighting
132 kW solar array
13.68 Year Simple Payback

North Vernon Municipal Airport

68.4 kW Ground Mount Solar Array
LED Lighting
Back-up Generator
Solar Maintenance and Monitoring

Plymouth Municipal Airport

500 kW Ground Mount Solar Array
Solar Maintenance and Remote Monitoring

Quincy Regional Airport

461.2 kW Solar Array
Solar Maintenance and Remote Monitoring
30 Year Production Warranty

San Franscisco International Airport

Facility Renovations
HVAC Upgrades
Investment Grade Energy Audit
Central Plant Upgrades

Tucson International Airport

129 Solar Arrays
Car Canopies
$35,000/month Savings
**Veregy acted as a subcontractor for this project*

47
Number of Airport Projects

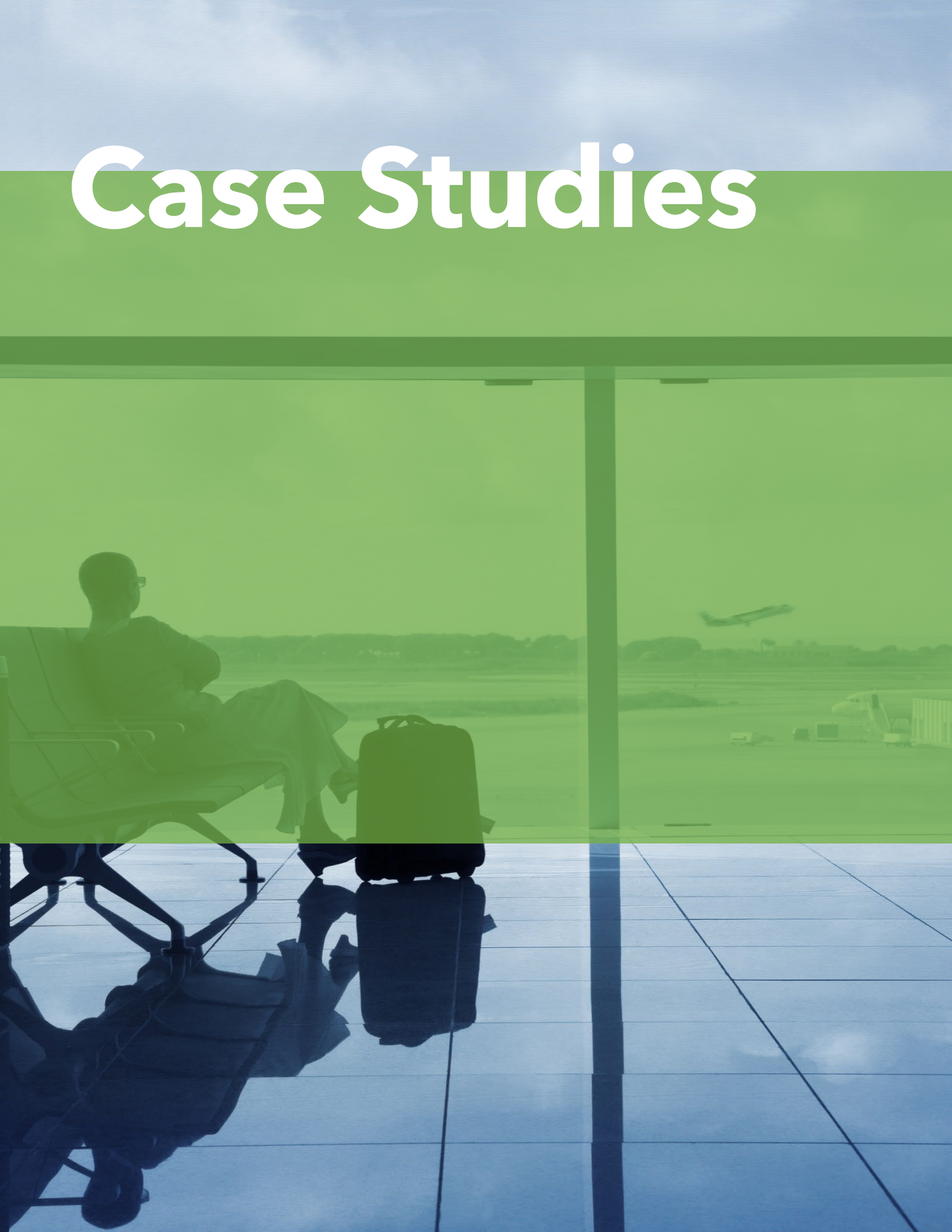
35 MW+
Veregy Installed Airport Solar

76,747,550
kWh Reduced per Year

$7.3 Million
Total Annual Savings

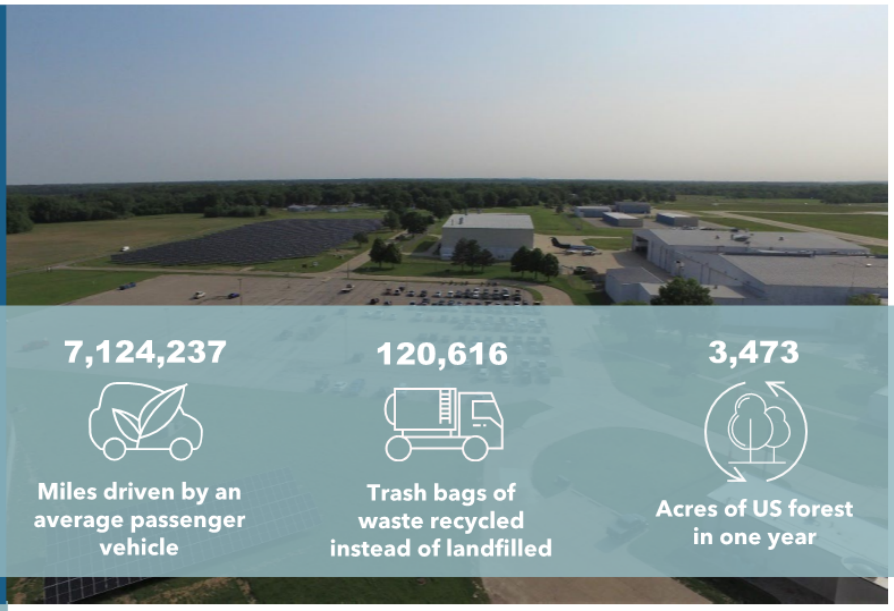
$4.1 Million
New Revenue Generation

Case Studies



Abraham Lincoln Capital Airport

Springfield, IL



PROJECT SAVINGS

7,124,237
Miles driven by an average passenger vehicle

120,616
Trash bags of waste recycled instead of landfilled

3,473
Acres of US forest in one year

DECARBONIZATION

PROJECT FINANCIALS

- Project Invesment: $6 Million
- $3.5M IL SREC & 3rd Party Financing
- 20 Year Guaranteed Savings: $6.7 M
- 30 Year Anticipated Savings: $14.1 M
- 6 Years Service & Insurance Included

PROJECT OVERVIEW

Veregy collaborated with the Abraham Lincoln Capital Airport (KSPI) to design and implement a project to improve the airport's operating budget and provide added revenue. The 2.88 MW solar project consists of six solar arrays spanning across three sites. The project will reduce three Airport and three Tenant electric utility accounts by over 90% each. The three airport accounts will be Net Metered by a combination of roof and ground mounted solar to provide significant savings. The other three ground mounted arrays will provide a Net Metering solution for one of the airport's tenants and will generate nearly 4,000,000 kWh annually.

This project will capitalize on efforts that the airport completed with the FAA previously in anticipation of a Solar Farm that would have provided power direct into the utility grid. Now those FAA permits have been utilized in a Net Metering solution for increased revenue and budgetary savings. This project is the largest airport owned solar array for Net Metering in the state of Illinois.

PROJECT HIGHLIGHTS

- 2.88 MW Solar Array
- Ground and Roof Mounted
- 30 Year Production Warranty
- Net Metering Savings and New Revenue Generation

PROJECT CONTACT
Corey Harper, Account Manager
317.281.7555
charper@veregy.com

CLIENT CONTACT
Mark Hanna, Executive Director
217.788.1060 ext. 2211
mhanna@flyspi.com

Columbus Regional Airport

Columbus, OH

PROJECT OVERVIEW

Veregy performed the design services to upgrade the central plant facilities for the Columbus Regional Airport Authority terminal. The work included building a fully cross-connected chilled water system between the three existing Chiller plants, replacing/adding the existing boilers used for heating hot water, replacing one of the chiller plants, interfacing new equipment with the existing building automation systems, and implementing a master metering. Veregy did extensive field investigation as part of the design to determine the appropriate, least cost-impacted pipe routings and equipment placement. The project's magnitude was split into multiple phases to limit the facility's downtime and manage the construction dollars. Through implementing these three phases, Veregy gained knowledge and helped shape the master plan for HVAC systems at the facility while continuing to develop the relationship with the maintenance and design staff.

PROJECT HIGHLIGHTS

- Utility Analysis
- Boiler Replacement
- Chiller Upgrades
- Mechanical Engineering
- Electrical Engineering
- Plumbing Upgrades

CLIENT CONTACT

Matt Langel, Project Manager
614.39.4000
mlangel@columbusairports.com

Evansville Regional Airport

Evansville, IN

PROJECT SAVINGS

3,178,681
Miles driven by an average passenger vehicle in one year

53,816
Trash bags of waste recycled in one year

1,550
Acres of US forest in one year

DECARBONIZATION

EVV
Evansville Regional Airport

PROJECT OVERVIEW

Evansville Regional Airport utilized parking lot space by installing 1.3MW of solar powered car canopies to generate more power to offset utility costs, while also providing sheltered parking. The 1.3 MW of solar energy installed is enough to power 50% of the airport terminal building while providing shelter for customer and rental vehicles. With the installation of this forward-thinking project, Evansville Regional Airport displayed their dedication and commitment to becoming a more sustainable facility and a leading example for other airports nationwide.

*Scan the QR Code above to watch the drone footage from this project.

PROJECT HIGHLIGHTS

- 1.3 MW Solar Car Canopies
- Remote Monitoring & Solar Maintenance
- Cost --$6.4 million
- Project Start Date: May 2019
- Completion Date: February 2020
- Annual Guaranteed Energy Savings: $282,582
- Actual Annual Savings: $1,105,223
- Awarded AAAE-Great Lakes "Project of the Year" Award.
- First solar covered parking installation at an Indiana airport.
- $18.5 Million total utility savings & parking revenue increase over the next 25 years.

PROJECT CONTACT

Kurt Schneider, Partner
317.607.6991
kschneider@veregy.com

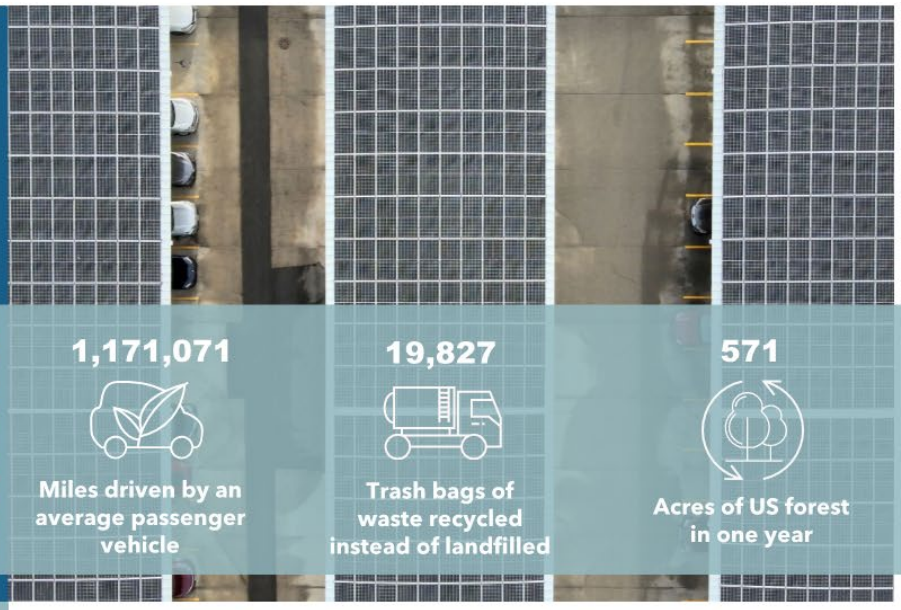
CLIENT CONTACT

Nate Hahn, Executive Director
813.421.4401
nate@evvairport.com

VEREGY

Fort Wayne International Airport

Fort Wayne, IN



PROJECT SAVINGS

1,171,071
Miles driven by an average passenger vehicle

19,827
Trash bags of waste recycled instead of landfilled

571
Acres of US forest in one year

DECARBONIZATION

FORT WAYNE INTERNATIONAL AIRPORT

PROJECT OVERVIEW

Veregy collaborated with the Fort Wayne Allen County Airport Authority to design a project that produces energy, but also reduces costs and eliminates excess charges for peak demand. Veregy currently utilizes in-house, remote monitoring and demand management technology to ensure a productive and stable system, while maintaining and servicing the solar arrays. With a combination of solar maintenance and demand management, Veregy will help the Fort Wayne Allen County Airport Authority stabilize one of the most variable items in its budgets – the cost of energy. This project combines a 552 kW Auto Canopy Solar System with Demand Management and Remote Monitoring.

PROJECT HIGHLIGHTS

- 552 kW Auto Canopy Solar Array
- Solar Maintenance & Remote Monitoring
- Demand Management
- Guaranteed Savings
- Project Start Date: March 2020
- Completion Date: October 2020
- Annual Guaranteed Energy Savings: $50,300
- Actual Annual Savings: $106,980

*Scan the QR Code above to watch the drone footage from this project.

PROJECT CONTACT
Corey Harper, Account Manager
317.281.7555
charper@veregy.com

CLIENT CONTACT
Scott Hinderman, Exc. Director
260.446.3427
hinderman@fwairport.com

Port of Friday Harbor Airport

Energy Efficiency Assessment

Friday Harbor, WA

PROJECT SAVINGS

165
Acres of U.S. Forests Each Year

5,982
Trash bags of waste recycled instead of landfilled

354,265
Miles Driven by an Average Gas-Powered Car

DECARBONIZATION

Project Investment: $72,240

Funding: FAA Airport Improvement Program Grant

Client Contact:
Corley McFarland
Precision Approach Engineering, Inc.
360.733.1567
CMcFarland@preappinc.com

Other ECMs

- Upgrade Facility Lighting
- Install Low-Flow Water Fixtures
- Install Additional Public EV Chargers
- Convert Port Fleet to Electric
- Convert Airfield Lights to LED
- Install Insulation in Admin Building
- Consolidate Electric Metering Across the Facility

PROJECT OVERVIEW

Veregy, in collaboration with Precision Approach Engineering, conducted a comprehensive energy efficiency assessment for the Port of Friday Harbor's Friday Harbor Airport facility. This assessment aimed to evaluate the Airport's energy requirements and pinpoint strategies to reduce energy and water consumption, utility expenses, and greenhouse gas emissions. The report examined the electric and water usage and the associated utility costs that fall under the Port's responsibility.

The report highlighted funding sources that the Port could leverage, aiding in implementing the suggested energy efficiency measures. The assessment identified eight specific energy efficiency measures. In addition to these immediate suggestions, the report proposed several long-term measures for the Port to explore, such as the installation of biodigesters, batteries for backup power, and steps to achieve airport carbon accreditation.

A key assessment aspect was a solar feasibility study, identifying potential projects like a 150kW AC system. This system is projected to produce an estimated 160,000 kWh annually, leading to substantial cost savings of approximately $18,500 annually.

PROJECT HIGHLIGHTS

- The ECMs are estimated to save approximately 195,000kWh, 31,000 gallons of water, and a total of $34,500 per year.

VEREGY

Indianapolis International Airport

Indianapolis, IN

PROJECT SAVINGS

27,633,334
Miles driven by an average passenger vehicle in one year

481,881
Trash bags of waste recycled in one year

13,175
Acres of US forest in one year

DECARBONIZATION

INDIANAPOLIS INTERNATIONAL AIRPORT

PROJECT OVERVIEW

Veregy collaborated with the Indianapolis Airport Authority (IAA) to create a system that produces energy while reducing costs and eliminating excess charges for peak demand. Veregy utilizes remote monitoring and demand management technology to ensure a productive and stable system, while maintaining the grounds and solar arrays. Along with solar services, the IAA and Veregy partnered to create a facilities management agreement. Veregy now manages and operates over 9,000 assets in two different facilities. This includes interior/exterior lighting, mechanical and electrical systems, hangar doors, pressure steam systems, and even snow removal. These initiatives helped the IAA stabilize one of the most variable items in its budgets – the cost of energy. Veregy is currently saving the IAA $1,045,288 a year in energy and operations costs. This project combines a 25MW ground mounted solar system with facilities management and operations.

PROJECT HIGHLIGHTS

- Ground Mounted Solar Array
- Solar Maintenance
- Demand Management
- Facilities Management
- Remote Monitoring

PROJECT CONTACT
Kurt Schneider, Partner
317.607.6991
kschneider@veregy.com

CLIENT CONTACT
Eric Anderson, Facilities Director
317.339.0782
eanderson@ind.com

Indianapolis International Airport, Cont.

Indianapolis, IN

PROJECT SAVINGS

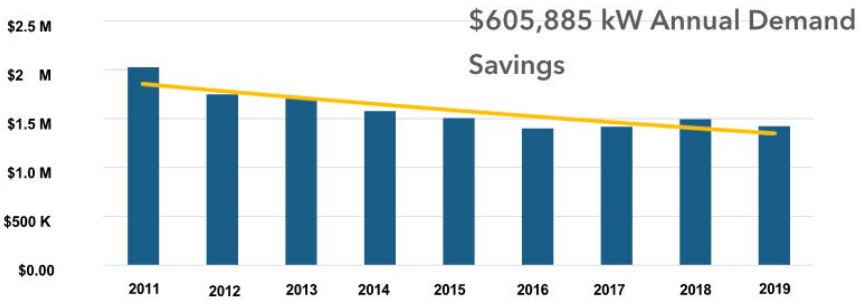
Savings Overview

With the expertise of the Veregy team, the IAA is currently saving $2,429,946 a year in Energy and Operations costs.

INDIANAPOLIS INTERNATIONAL AIRPORT

IND Central Energy Plant

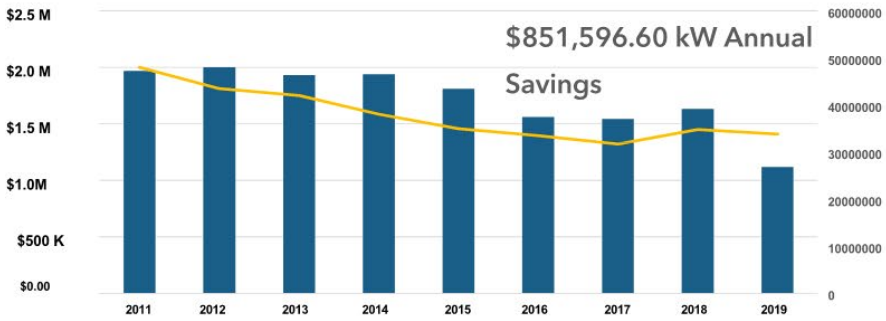
kW Demand Reduction Facility Management Effectiveness



IND CEP kW Demand Usage Cost
2011 - $2,026,655 to 2019 - $1,420,770

IND Central Energy Plant

kW Consumption Reduction Facility Management Effectiveness



IND CEP kW Co2019nsumption Rate 2011 - $0.037 to - $0.033 or
2011 - $1.97 M to 2019 - $1.12 M

JACKSON COUNTY AIRPORT & COUNTY-WIDE Energy Project

Jackson, MI

PROJECTED 20-YEAR PROJECT SAVINGS

31,370	6,820	1,307,115
Tons of CO2 Reduced	Cars removed from the road	Trees planted to sequester carbon

DECARBONIZATION

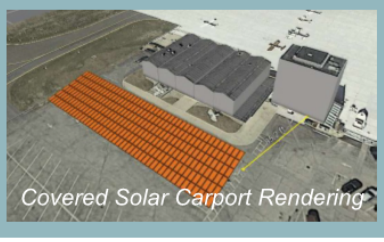
Contract Amount:
$28,132,751

Est. Cost After Federal Funding (ARPA/IRA):
$14,423,506

Projected 20 Year Energy & Operations Savings:
$26,933,956

"We have always sought ways to reduce our environmental footprint and reduce our energy costs. This project does both and improves the comfort and therefore quality of our employees' lives while at work. We are very pleased to partner with Veregy, an industry leader in the field."

- Michael Overton, Administrator/Controller


Covered Solar Carport Rendering

PROJECT OVERVIEW

With a focus on stretching taxpayer dollars, the County and Veregy worked together to develop a comprehensive scope of work across 25+ locations, including the Airport Terminal/Tower, that will save approximately $26.9M in energy and operational costs for Jackson County and its taxpayers over the next 20 years. With a 48% ($13.7M) cost reduction through available federal funding (ARPA/IRA), this was an opportune time for the County to invest in energy and operational efficiency while enhancing County facilities. Jackson County and Veregy are committed to utilizing a skilled workforce and maximizing local subcontractor participation to create jobs and stimulate the local economy.

PROJECT HIGHLIGHTS

- (7) solar arrays, totaling 1.071 megawatts DC, at the Airport Terminal, Youth Center, Department of Transportation, Landfill, Human Services and Event Center, and Courthouse
- HVAC system replacements including several chillers, boilers, air handling units, rooftop units, at the Airport Terminal/Tower and various other facilities.
- New geothermal system at the Courthouse
- Installation of building automation system including Orchestrate integration to LightLevel (solar asset management) and EnergyTracer (utility monitoring/analytics)
- LED lighting upgrades
- Electric vehicle charging at the Courthouse.
- Master planning services countywide
- Building refurbishment and wastewater treatment at the Landfill with a goal of 95% leachate reduction and net-zero

VEREGY

Marion Municipal Airport

Marion, IN

MARION MUNICIPAL AIRPORT

PROJECT SAVINGS

284,969
Miles driven by an average passenger vehicle

4,825
Trash bags of waste recycled instead of landfilled

139
Acres of US forest in one year

DECARBONIZATION

PROJECT OVERVIEW

Veregy collaborated with the Marion Municipal Airport to design a project that produces energy and significantly reduces the airport's long-term operating budget. Prior to this project, the Terminal building and Hangar J comprised nearly 77% of the airport's electrical utility bills. Once completed, the project will install a 132 kW solar array and offset 100% of those facilities' kWh usage. Phase 1 of the project also includes a significant portion of LED lighting upgrades to reduce the airport's electricity usage further and provide further operational savings.

PROJECT HIGHLIGHTS

- Solar Array
- LED Lighting
- 159,929.9 kWh offset
- Terminal & Hangar J
- Solar Maintenance
- Guaranteed Savings
- Remote Monitoring
- 13.68 Years Simple Pay Back
- No penetrations to the roof

PROJECT CONTACT
Corey Harper,
Account Manager
317.607.6991
charper@veregy.com

CLIENT CONTACT
Jim McKinney,
Airport BOAC Pres.
813.421.4401
boac@cityofmarion.in.gov

North Vernon Municipal Airport

North Vernon, IN

PROJECT OVERVIEW

Veregy collaborated with the North Vernon Municipal Airport to design a project that produces energy, but also reduces costs and eliminates excess charges for peak demand. Veregy utilizes remote monitoring and demand management technology to ensure a productive and stable system, while maintaining and servicing the solar arrays. This project is just one of many solar projects completed with the City of North Vernon and Veregy. North Vernon now has solar arrays at 22 different sites throughout the city. With a combination of solar maintenance and demand management, Veregy will help the North Vernon Municipal Airport stabilize one of the most variable items in its budgets – the cost of energy. This project combines a 68.4 kW ground mount solar array with demand management and remote monitoring.

PROJECT HIGHLIGHTS

- Ground Mounted Solar Array
- Solar Maintenance
- Back-up Generator
- Increased Revenue
- LED Lighting
- Remote Monitoring

PROJECT CONTACT

Kurt Schneider, Partner
317.607.6991
kschneider@veregy.com

CLIENT CONTACT

Ryan Curry, Dir. of Operations
812.767.3047
rcurry@nvair.org

Plymouth Municipal Airport

Plymouth, IN

PROJECT OVERVIEW

Veregy collaborated with the Plymouth Municipal Airport to develop a preventative maintenance contract to maintain and service the ground-mounted solar arrays. Veregy utilizes remote monitoring and demand management technology to ensure a productive and stable system, while using the expertise and experience of the in-house service team to correct the site in the case of needed repairs. With a combination of solar maintenance and demand management, Veregy will help Plymouth Municipal Airport stabilize one of the most variable items in its budget – energy costs. This project combines a 500 kW ground-mount solar array with demand management and remote monitoring.

PROJECT HIGHLIGHTS

- Solar Maintenance
- Demand Management
- Increased Revenue
- Remote Monitoring

PROJECT CONTACT

Kurt Schneider, Partner
317.607.6991
kschneider@veregy.com

CLIENT CONTACT

Pezhman Rahimi
949.945.3690
pezhman.rahimi@urecorp.com

VEREGY

Quincy Regional Airport

Quincy, IL

Quincy Regional Airport

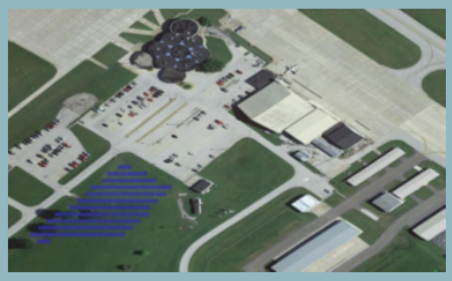
PROJECT SAVINGS

921,306
Miles driven by an average passenger vehicle

15,598
Trash bags of waste recycled instead of landfilled

449
Acres of US forest in one year

DECARBONIZATION



PROJECT FINANCIALS

- Project Investment: $1.4 M
- 30 Year Savings: $2.5 Million
- $681,329 IL SREC & 3rd Party Financing
- 30 Year Production Warranty

PROJECT OVERVIEW

Veregy collaborated with the Quincy Regional Airport to design a project that produces energy and significantly reduces the airport's operating budget. Prior to this project, the terminal building was over 70% of the airport's kWh usage and utility bills. Once completed, Phase 1 of the project will include a 461 KW solar array and offset 100% of the terminal building's electricity. This not only reduces the airport's operating budget and provides a levelized energy cost, but it will also complete the necessary permits for a future utility-scale solar array. Approximately 300 Ac of existing airport property will become "shovel ready" for future revenue generation, which could significantly boost the airport's operating budget.

Veregy worked intensely to secure IL SREC funds and a third-party innovative finance mechanism that covered nearly half the overall project cost.

PROJECT HIGHLIGHTS

- 461.2 kW Solar Array
- Solar Maintenance
- Remote Monitoring
- Phase 2 Shovel Ready

PROJECT CONTACT
Corey Harper,
Account Manager
317.281.7555
charper@veregy.com

CLIENT CONTACT
Gabriel Hanafin,
Assistant to Airport Dir.
217.885.3285
ghanafin@quincyill.gov

San Francisco International Airport

San Francisco, CA

PROJECT OVERVIEW

Veregy was the Commissioning Authority for the prestigious Terminal 2 Renovation that achieved LEED Gold certification. This project was a complete renovation of the facility and included many energy efficient and emerging technology applications such as displacement ventilation and daylight harvesting. Veregy was requested to fulfill the commissioning role based on the successful results of other energy efficiency projects including an airport-wide Investment Grade Energy Audit, re-design of the central boiler plant and retro-commissioning of the International Terminal. The 800,000 square foot facility is served by the central plant for both hot and chilled water. Veregy has worked closely with the design team to improve the sequences of operation and improve operational efficiency.

PROJECT HIGHLIGHTS

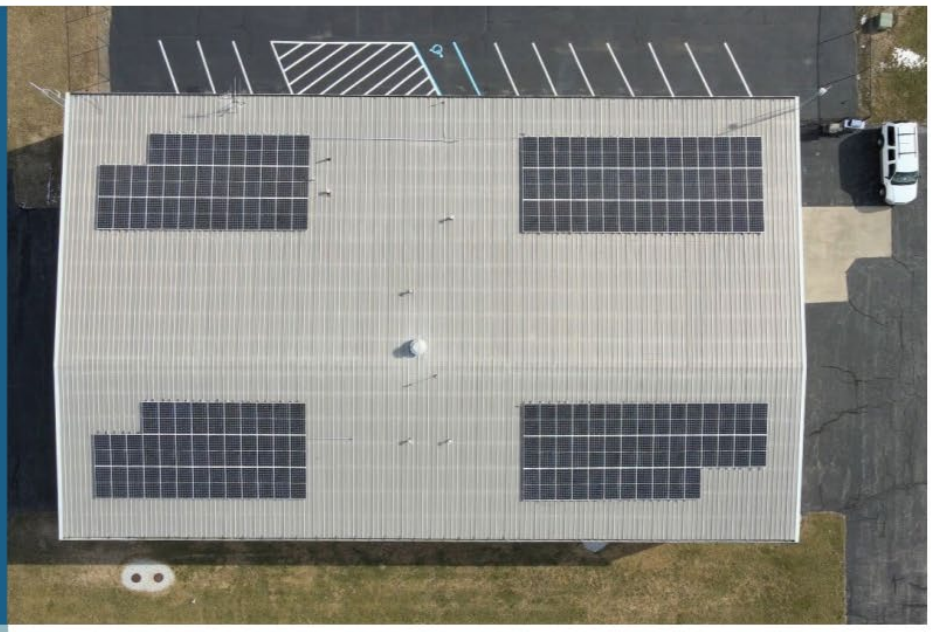
- Facility Renovations
- LEED-Gold Certification
- HVAC Upgrades
- Investment Grade Energy Audit
- Central Plant Upgrades
- Retro-commissioning of Terminal

PROJECT CONTACT
Shea Dibble
949.0529.5304
sdibble@veregy.com

CLIENT CONTACT
Anthony Bernheim
650.821.7607

Shelbyville Municipal Airport

Shelbyville, IN



PROJECT OVERVIEW

Veregy collaborated with the Shelbyville Municipal Airport to design a project that produces energy, but also reduces costs and eliminates excess charges for peak demand. This project is just one of many solar projects completed with the City of Shelbyville and Veregy. Shelbyville now has solar arrays at 14 different sites throughout the city, including the animal shelter, multiple parks, and the fire station. Veregy currently utilizes remote monitoring and demand management technology to ensure a productive and stable system, while also maintaining and servicing the solar arrays. With a combination of solar maintenance and demand management, Veregy will help the Shelbyville Municipal Airport stabilize one of the most variable items in its budgets – the cost of energy. This project combines a 154 kW ground mount solar array with demand management and remote monitoring services.

PROJECT HIGHLIGHTS

- 154 kW solar energy
- Completed December 2021
- Remote system monitoring
- Solar maintenance contract
- Cost --$467,000

PROJECT CONTACT

Rick Anderson, Account Manager
317.693.9779
randerson@veregy.com

CLIENT CONTACT

Thomas DeBaun, Mayor
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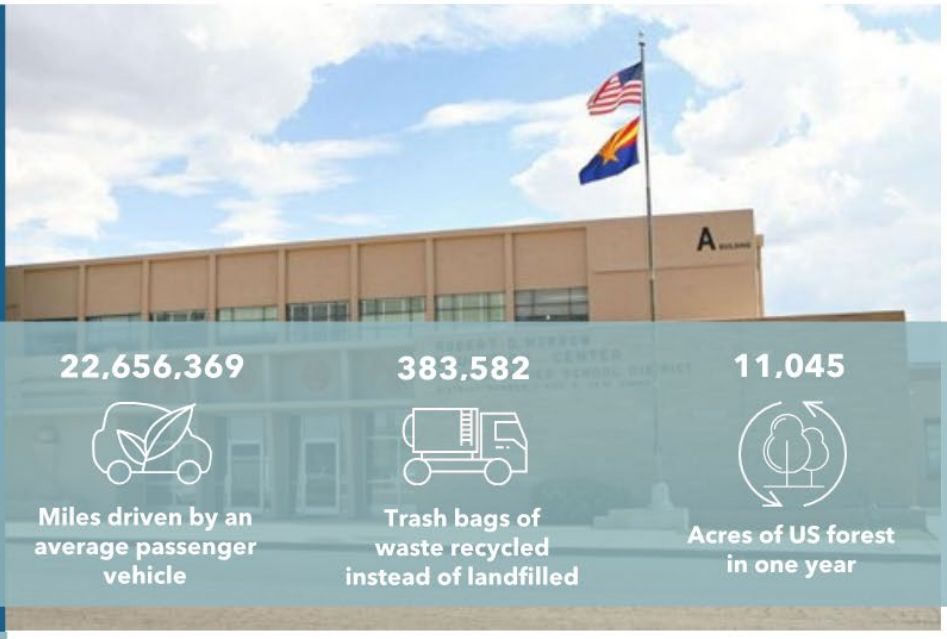
mayor@cityofshelbyvillein.com

Tucson Unified School District

Tucson, AZ



PROJECT OVERVIEW

Following Veregy's completion of an Investment Grade Audit, the Tucson Unified School District partnered with Veregy through a Guaranteed Energy Savings Performance Contract. To reduce maintenance costs and energy consumption, lighting components - both exterior and interior -were replaced with energy efficient fixtures that drastically improved lighting levels and reduced the school districts' carbon footprint. A building automation system, as well as weatherization, was added to several of the buildings. In addition, Veregy updated domestic water systems with mechanical upgrades, resulting in more Green Behavior Management. These modernized improvements greatly reduced energy and water consumption.

PROJECT HIGHLIGHTS

- Interior and Exterior Lighting
- Building Automation System
- Weatherization
- Mechanical and Domestic Water
- System Upgrades
- Green Behavior Management

Solutions

VEREGY

"We have always sought ways to reduce our environmental footprint and reduce our energy costs. This project does both and improves the comfort and quality of our employees' lives while at work. We are very pleased to partner with Veregy, an industry leader in the field."

- *Michael Overton, Administrator/Controller,*

Jackson County, OH

Veregy's Approach to Airport Enhancements

Veregy adopts a comprehensive and strategic approach, meticulously identifying specific needs and uncovering potential opportunities to enhance comfort, boost efficiency, and forge a clear path towards decarbonization. Specializing in the unique domain of airport facilities, Veregy offers unparalleled in-house expertise in facility maintenance, innovative design, and advanced engineering.

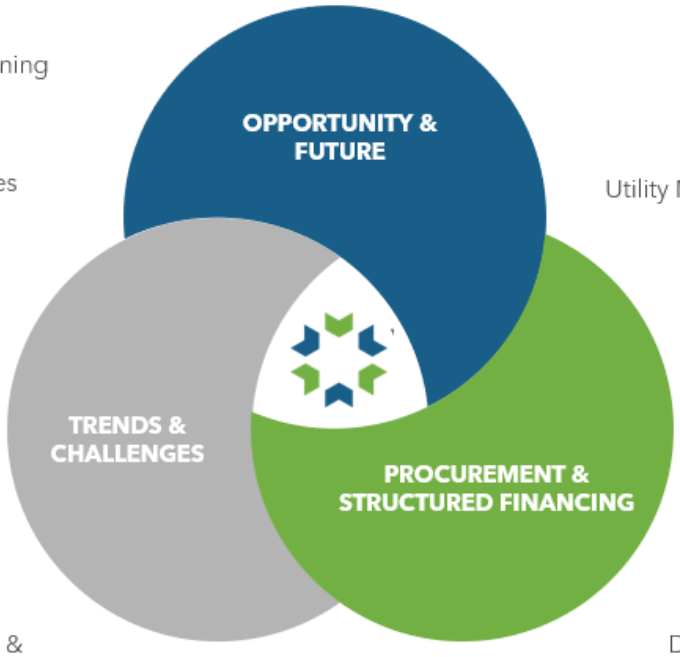
This process commences with Veregy meticulously aligning its strategies with the objectives and visions of all key stakeholders. This alignment is critical in enhancing the energy efficiency of airport operations. Furthermore, it involves a detailed long-term master planning process, meticulously crafted to positively influence operational dynamics, enhance overall comfort, and significantly improve the experiences of both travelers and staff.

Veregy's methodology integrates both digital and physical solutions into a cohesive, long-term master plan. This integration is key to maximizing operational efficiencies and utility savings, while strategically preserving and optimizing capital expenditures.

SIMPLIFY AND ACCELERATE

PHYSICAL SOLUTIONS

- Decarbonization Planning
- Central Plant Upgrades
- EV Infrastructure
- Lighting & Security Systems
- Distributed Energy
- Mechanical, Electrical & Plumbing



DIGITAL SOLUTIONS

- Smart Building Planning
- Utility Management & Monitoring
- Electric Load Shed/Shift
- AI & Analytics
- Open Platform
- Decarbonization Reporting

Distributed Energy and Decarbonization Planning

Renewable solutions and energy storage has become more common and accessible than ever. Whether providing resiliency during times of energy crisis or attaining energy and demand reduction to reduce utility bills, airports across the country are turning to distributed energy solutions. These solutions future-proof their airports, providing an Environmental, Sustainable, and Governance (ESG) strategy that helps recruit pilots, staff, and loyal travelers.

Decarbonization

In today's environment, decarbonization is increasingly recognized as a critical long-term solution to a sustainable planet. Most airports have very old energy infrastructures that are inefficient and expensive to maintain. In addition, there is tremendous pressure to reduce global GHG emissions. External regulations, policy changes, internal energy usage, and GHG emission reduction goals drive airports to develop an actionable roadmap that produces results. Veregy is well-positioned to provide decarbonization strategies and services that focus on helping businesses to meet GHG emissions reduction goals, including net-zero solutions.

Distributed Generation (DG)

The DG side of the equation, such as solar, wind, or combined heat and power (CHP), does the bulk of the work by providing energy that substantially reduces the overall site load. Veregy will prepare a utility data analysis for each airport building suitable for renewables to ensure the facility is energy efficient and the renewable technology is sized to meet the demand.

Energy Storage

The storage side of the system works in coordination, intelligently utilizing energy reserves for maximum benefit. One example is batteries store energy when needed most – during peak hours or outages. Veregy installs safe, 100% code-compliant systems adherent to all the latest building and fire standards.

Generators

Power outages can be extremely disruptive at airports. Generators are the last line of defense in times of crisis, switching on when everything else fails. If you operate an airport, having generators on-site and intelligently tied into your system is a 'must' for when the sun isn't shining, your batteries are running low, and an outage occurs.

Geothermal

Geothermal or ground source heat pump (GSHP) systems are high-efficiency, renewable energy technology systems that are becoming more common in facilities that need space conditioning. They are a long-term heating/air conditioning building strategy, creating quality environments with low operating costs. They are also easy to maintain and have a long life.

Veregy's turn-key master planning and decarbonization plan can help your airport become one of the leading airports in sustainability in the US.

Veregy's Portfolio of Digital Services

Veregy can integrate, design, and manage your airport building systems to provide you with the maximum benefit to control overall energy use and put your airport on the path to decarbonization. Veregy's Digital Services are designed to unify complex, fragmented, and labor-intensive facility management systems into a collaborative, user-friendly platform. These services address the variety of challenges operations personnel face on a day-to-day basis.

Digital

Orchestrate

A powerful, cloud-based software solution developed specifically for facility optimization. Through Orchestrate, facility management systems are integrated into a single, user-friendly platform which drives opportunities for greater operational efficiencies/savings.

Automation Composer

A modern building automation system with configurable interfaces which are designed with the end user in mind. Embrace a vendor-neutral building automation system that is easy to use, easy to maintain, and easy to expand.

Energy Master

Monitor, analyze, and manage energy consumption. Gain real-time insights into which systems are consuming excess energy, take action, and watch your energy bills decline.

Facility Conductor

Free up on-site operations personnel to focus on proactive maintenance issues. Automate tedious tasks, enabling your facility systems to work in harmony. Leverage virtual engineering support to monitor your systems remotely and reduce operational expenditures.

"While cost savings is a strong motivator, the provision of safe, efficient building environments for the public and our employees is the overarching goal. We appreciate Veregy's understanding of this goal and your expertise in helping us make progress. Our project will contribute to a more sustainable future by extending the life of our buildings."

- *Carri Brown. County Administrator*
  Fairfield County

LightLevel

Many airports are utilizing Veregy's modern solar asset management software. LightLevel simplifies your solar energy projects with our custom, state-of-the-art control hardware. LightLevel allows you to monitor, measure, and verify your solar production anywhere in the world.

As a modern and lean solar monitoring application, LightLevel gives you exactly the features your staff needs to do their jobs and properly maintain solar PV installations in an easy-to-use interface. Access your current, monthly, and all-time solar production data with various easy-to-read charts and figures.

With A User-Friendly, Simple, And Modern Interface, LightLevel Provides You With:

- Real-time energy production
- Public-facing web-based kiosk
- Map of the entire portfolio with system size
- Equipment status and monitoring
- Key Performance Indicators (KPIs)
- Real-time weather and irradiance data
- Weather-corrected performance data
- Seamless integration with Veregy solar hardware, providing 4G and LTE connectivity.
- Custom alarms to reduce downtime and ensure production guarantees are met.

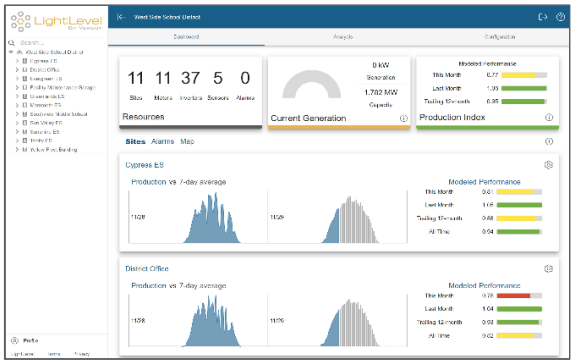
Airports Utilizing LightLevel

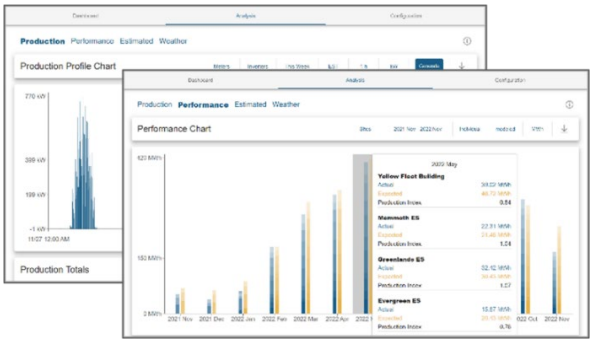
- Fort Wayne International Airport
- Quincy Regional Airport
- Abraham Lincoln Capital Airport

Example LightLevel Dashboards

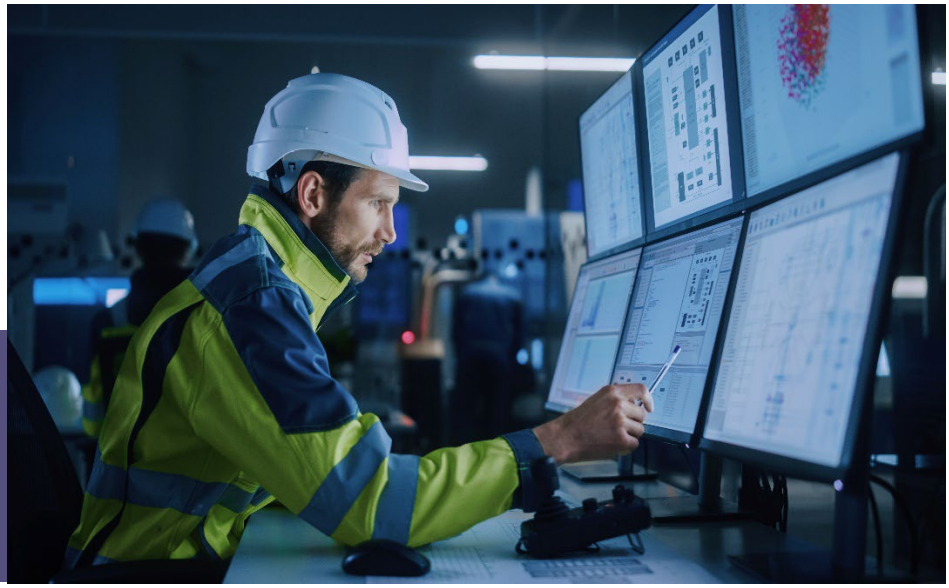
Many airports are utilizing Veregy's modern solar asset management software. LightLevel simplifies your solar energy projects with our custom, state-of-the-art control hardware. LightLevel allows you to monitor, measure, and verify your solar production anywhere in the world.

Analyze and visualize short-term and long-term solar system performance by building, meter, or inverter.





Central Plant Design Capabilities



Central Plant
Many airports central plant facilities have opportunities for sustainable upgrades. Veregy has the expertise and qualifications to design, build, or upgrade a central plant for your airport. Central plants are often used at airports to serve multiple buildings with heating and cooling agents from a central plant source. Veregy can design and construct a central plant or cogeneration system providing power, heat, and cooling to a building.

Facility and Maintenance Solutions
Veregy provides complete, beginning-to-end operational and facility maintenance solutions, including customized facility maintenance strategies to resolve facility and staffing challenges. Our services are flexible and scalable from build, own, operate, and maintain (BOOM), design, build, own, operate and maintain (DBOOM), operations and maintenance (O&M) on specific systems; we will work with you to develop the service solution that works best.

- Preventative and Corrective Maintenance
- CMMS Implementation
- Monitoring and Alerts
- Disaster Recovery Planning
- Operations Documentation
- Annual Operating Budget Planning
- Long-Term Capital Plan
- Workplace Safety

Indianapolis International Airport
Central Energy Plant Operation and Demand Management with 24/7/365 Maintenance & Operations.

Manage and operate over 9,000 assets in two facilities including, interior/exterior lighting, mechanical and electrical systems, hangar doors, pressure steam systems, and snow removal.

San Francisco International Airport
- Replaced two (2) 3,000-ton chillers with two (2) 3,500-ton VFD centrifugal chillers.
- 31 Total Projects Since 2005
- Boiler sizing and installation, chilled water distribution, heat recovery chiller plant, and BAS study.

Columbus Regional Airport
Built a fully cross-connected chilled water system between the three existing chiller plants. Replaced the existing boilers used for heating hot water. Installed a new 600-ton centrifugal chiller to replace existing 400-ton chiller. Installed new 600-ton cooling tower.

Commissioning & Retro-Commissioning

Commissioning
Veregy's development of a commissioning plan begins during the initial stages of a guaranteed energy-saving project, ensuring full-integration with design, construction, startup, functional testing, training, acceptance, and measurement and verification (M&V). As part of Veregy's extensive effort to meet project performance guarantees, we focus commissioning efforts on the planned project goals.

Veregy follows the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) commissioning benchmark and all current guidelines published by the Department of Energy (DOE), United States Green Building Council (USGBC), and Federal Energy Management Program (FEMP).

Retro-Commissioning
Veregy's retro-commissioning plans optimize system functionality to maximize efficiency reflecting the current building configuration and use. Retro-commissioning is an inclusive and systematic process that intends not only to optimize how equipment and systems operate, but to optimize how the systems function together. The primary focus is on using O&M tune-up activities and diagnostic testing to optimize the performance of building systems. Retro-commissioning is not a substitute for major repair work but is used in conjunction with major equipment repairs and/or replacements.

San Franscisco International Airport
Eighteen (18) Commissioning Projects and two (2) Retro Commissioning Projects.

- Terminal 1 Center
- Terminal 1 Interim Boarding Area B
- Terminal 1 Boarding Area B
- Terminal 2
- Terminal 2 Boarding Area D
- Building 575
- Terminal 3 Boarding Area E
- Terminal 3 East
- West Cargo
- Security Access Office (Tenant Improvement)
- Big Room
- Grand Hyatt Hotel
- Terminal 3 West Modernization
- Chiller Replacement
- EMCS PMSS and Cx
- AirTrainExtension (Hotel and Long-Term Parking Stations)
- C3C Make Ready 2.2 (Tenant Improvement)
- Duty Free Shops

Inflation Reduction Act and Investment Tax Credits

With the Inflation Reduction Act's new Direct Pay ITC, extension/increase of the current ITC, and additional PTC, airports and aviation facilities can now utilize tax credits and federal funding more than ever to help offset the cost of renewable energy projects.

In addition to Investment Tax Credit increases on solar energy, the IRA includes several additional incentives that could potentially help offset the cost of a qualifying project.

- 10% Adder for US Domestic Content on project materials, such as solar panel content and roof materials.
- 10% Adder for projects in an "Energy Community" – areas that used to be coal mines, oil fields, or natural gas storage/transport/extraction sites.
- 10-20% Adder for projects in Environmental Justice (qualified low-income community) areas.

	2023	2024	2025	2026	2027-2032
PROJECTS UNDER 1 MW AC* ***Projects over 1 MW will have additional criteria to meet for ITC eligibility.**					
Base ITC	30%	30%	30%	30%	30%
Domestic Content	10%	10%	10%	10%	10%
Siting in "Energy Community"	10%	10%	10%	10%	10%
LOW INCOME BONUS – 10% OR 20%					
Low-Income Community or on Indian Land	10%	10%	10%	10%	10%
Qualified Low-Income Residential Building Project or Qualified Low-Income Economic Benefit Project	20%	20%	0%	0%	0%

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